



ADVANCING HEALTH EDUCATION & RESEARCH



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AVA Research Reviews provides AVA members with recent published, peer-reviewed articles in a broad array of violence and abuse topics. The goal is to highlight and disseminate violence and abuse research in a timely fashion, and to enhance healthcare providers' practice by fostering the educational mission of AVA

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AVA Research Review

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Review Title: Traumatic Experiences Related to 9/11: Homogeneity of Severe Posttraumatic Stress Disorder Symptom Profiles in Children and Adolescents

Reviewers: Jeremiah D. Williams, B.A., Hazel J. Shah, B.S. & Betty S. Lai, Ph.D., School of Public Health, Georgia State University

Article: Guffanti, G., Geronazzo-Alman, Lupo., Fan, B., Duarte., C, Musa, G., Hoven, C. (2016). Homogeneity of Severe Posttraumatic Stress Disorder Symptom Profiles in Children and Adolescents Across Gender, Age, and Traumatic Experiences Related to 9/11. *Journal of Traumatic Stress*, 29(5), 430-439.

Introductory Comment:

Traumatic events can range from natural disasters, such as hurricanes, to manmade catastrophic events, such as terrorist attacks. Patients diagnosed with posttraumatic stress disorder (PTSD) following exposure to traumatic events will typically exhibit a variety of symptom profiles.

This paper extends research conducted among adults to children and adolescents. This paper analyzes PTSD symptom profiles among New York City public school students in grades 4-12 who reported exposure(s) to the 9/11 World Trade Center attacks.

Background:

Understanding youth PTSD symptom profiles is an important issue as youth may have varying patterns of symptoms. However, it is not clear which types of underlying profiles of PTSD symptoms may exist among youth. Findings from studies with adults have generally identified two to four discrete profiles that vary in PTSD symptom severity. Gender, age, and exposure differences in PTSD symptoms have been observed, but findings have been largely inconsistent.

Relevant literature indicates that differences across groups characterized by gender, age, and type of trauma exposure are potentially vital to understanding heterogeneity in PTSD symptoms in youth and thus warrant further investigation. This study significantly expands the literature by examining the latent structure of PTSD symptoms in American youth based on exposure to the World Trade Center attacks on 9/11.

Aims/hypotheses of article:

The study examined latent profiles of PTSD, examining both symptoms and severity. Using the Diagnostic Interview Schedule for Children Predictive Scales (DPS), they hypothesized that they would find three latent profiles (low, intermediate, and severe disturbance), that would vary qualitatively with regard to symptom configuration, and they also hypothesized that classes would vary quantitatively with regard to level of severity. Furthermore, the study investigated the impact of variation in gender, age, and empirically derived profiles of exposure to 9/11 on the structure of severe PTSD. Investigators hypothesized that severe PTSD would be invariant with regard to gender, age, and 9/11 exposure profiles.

Methods:

The study evaluated 6,670 (of 8,236 surveyed) New York City public school students that reported experiencing at least one of three types of traumatic exposures to 9/11: direct, indirect, or media exposure. The assessment process consisted of a self-report questionnaire that was administered six months following the 9/11 attacks. The participants were separated into two grade ranges and then further divided by gender within these respective groups: males (n = 1393) and females (n = 1773) in grades 4-8, and males (n = 1702) and females (n = 1802) in grades 9-12. After acquiring parental consent, the questionnaire measured exposure and the DPS screened for PTSD and seven other disorders. Additionally, the DPS evaluated the severity of the following eight PTSD symptoms: recurrent recollections; nightmares; avoidance of thoughts, feelings, or conversations; avoidance of activities or places; avoidance of people; foreshortened future; difficulty sleeping, and difficulty concentrating. For analyses, Lower Bayesian Information Criterion values were used to identify better fitting models, although parsimony was also considered.

Relevant Findings:

Latent class profiles were derived by grouping participants based on PTSD symptoms alone, symptoms in combination with impairment indicators, and symptoms when stratified by age and gender, as well as by empirically defined classes of exposure. The findings supported the presence of four distinct PTSD symptom latent profiles. The latent profiles were distinguished into a low disturbance class, two intermediate disturbance classes, and a severe disturbance class. However, amongst children with severe PTSD, heterogeneity pertaining to age, gender, and type of exposure was not statistically significant.

Conclusions:

This examination provided a significant research contribution as it was the first to analyze latent PTSD symptom profiles among a representative sample of children and adolescents exposed to 9/11. Severe PTSD syndrome was homogeneous across the entire sample with regard to age, gender, and exposure to 9/11. The study results showed that both PTSD symptoms and signs of impairments were only observed within the severe disturbance group.

Limitations:

There were several limitations to the study. The DPS did not cover the full range of PTSD symptoms; therefore, comparison with previous studies on the latent PTSD structure was only tentative. Additionally, exposure to traumatic events before 9/11 and socioeconomic status were not examined in the study. Furthermore, the various latent class analysis models utilized were obtained in a single sample. Lastly, the generalizability of the findings may be limited due to the uniqueness of the 9/11 attacks and the assessment of the PTSD six months after exposure.

Reviewers' Comments:

Understanding how PTSD symptoms may cluster together within youth is important for both research and practice. This study makes a valuable contribution to the literature due to its use of a large, representative sample of youth exposed to a community-wide disaster (9/11), as well as its use of person-centered analyses (i.e. latent class analysis).